

---

# Initiating a Measurement Program

2003-11-26

P. Siemons

---

the Quantitative Approach to Quality Management and Performance Improvement

Initiating a Measurement Program - P. Siemons

2003-11-26 page 1

## Agenda

---

- Balanced Score Card
  - Metrics as Management Instrument
- Measurements
  - Getting the Metrics
- Commitment
  - Maintaining Motivation

---

the Quantitative Approach to Quality Management and Performance Improvement

Initiating a Measurement Program - P. Siemons

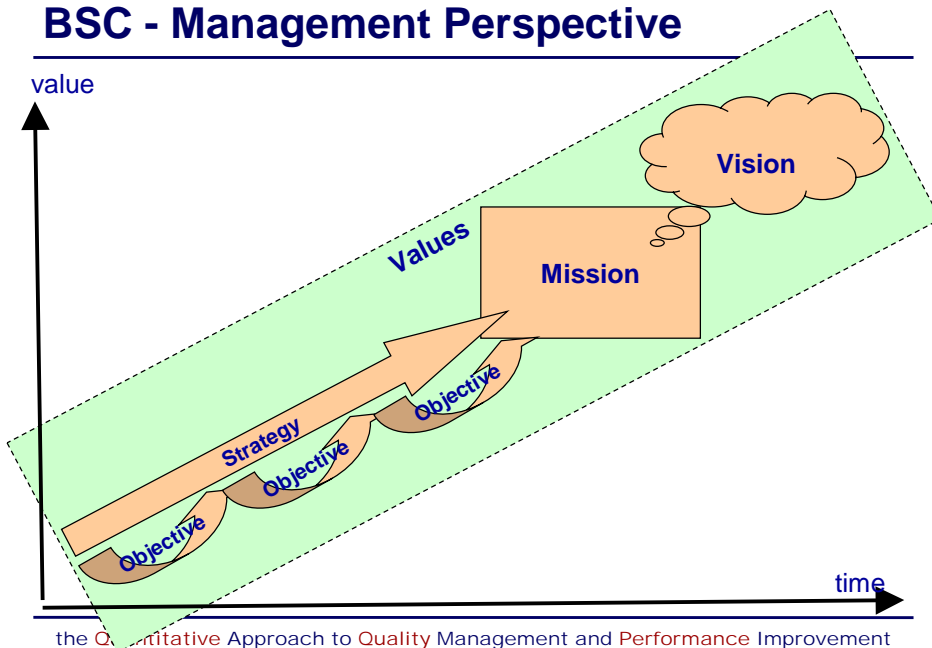
2003-11-26 page 2

# Balanced Score Card

Metrics as Management Instrument

the Quantitative Approach to Quality Management and Performance Improvement

## BSC - Management Perspective

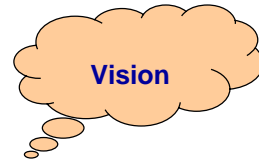


the Quantitative Approach to Quality Management and Performance Improvement

## BSC - Management Perspective

- **Vision**

- Abstract
- Ultra Long Term
- How does our ideal world look like?
- What are our deepest desires?
- This is our ultimate goal...
- This is what we live for...
- What we strive for...
- But probably never will reach...



the Quantitative Approach to Quality Management and Performance Improvement

Initiating a Measurement Program - P. Siemons

2003-11-26 page 5

## BSC - Management Perspective

- **Mission**

- Concrete
- Long Term
- What role do play in our vision
- How do we contribute to achieving our vision
- This is our goal...
- This is what we plan for...
- What we work for...
- To make it happen...

**Mission**

the Quantitative Approach to Quality Management and Performance Improvement

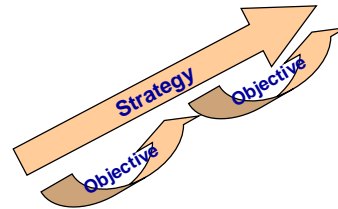
Initiating a Measurement Program - P. Siemons

2003-11-26 page 6

## BSC - Management Perspective

- **Strategy**

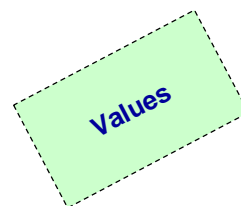
- Concrete
- Medium Term
- How to implement our mission
- What approach to take
- This is our goal made smart...
- This identifies our intermediate objects...
- The tools and methods we will use...
- To reach each of those...



## BSC - Management Perspective

- **Values**

- Abstract
- Eternal
- Our values determine the Boundaries of our
  - Vision
  - Mission and
  - Strategy
- Our values tell us what we will NOT do to achieve our goals



## BSC - Balanced View

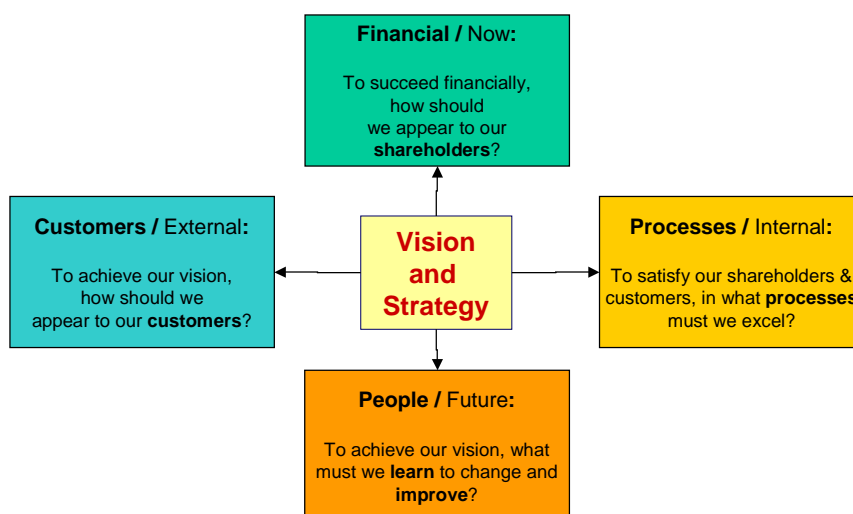
- Multiple factors determine the success of our strategy
- Focusing on a subset of those leads to
  - Sub-optimization (at best)
  - Total failure (at worst)
- To manage all aspects a balanced view is needed on the success factors
  - In terms of metrics: a “Balanced Score Card”

the Quantitative Approach to Quality Management and Performance Improvement

Initiating a Measurement Program - P. Siemons

2003-11-26 page 9

## BSC - Balanced View

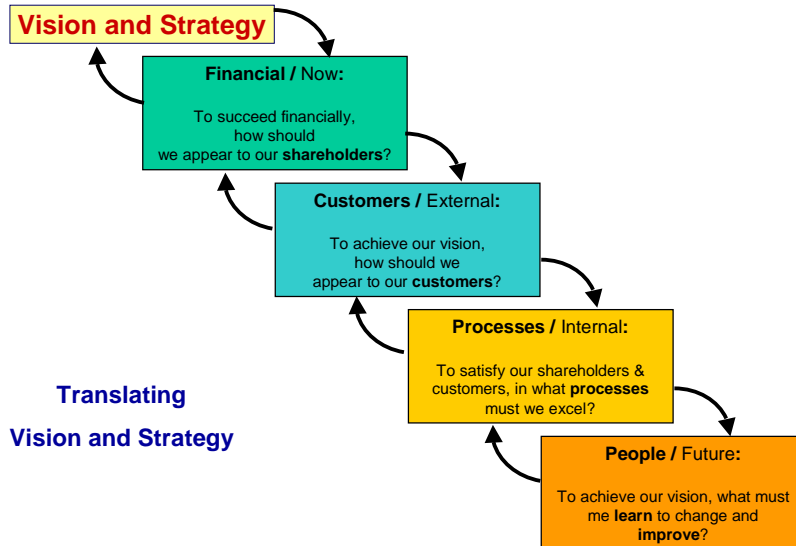


the Quantitative Approach to Quality Management and Performance Improvement

Initiating a Measurement Program - P. Siemons

2003-11-26 page 10

## BSC - Balanced View



the Quantitative Approach to Quality Management and Performance Improvement

Initiating a Measurement Program - P. Siemons

2003-11-26 page 11

## BSC - Description

- Measurement is the language that gives clarity to vague concepts
- Measurements are used to communicate
- Building the scorecard develops consensus and teamwork

the Quantitative Approach to Quality Management and Performance Improvement

Initiating a Measurement Program - P. Siemons

2003-11-26 page 12

## BSC - Example

Perspective	Objectives	Metrics	Targets	By End Of
Financial	•Turnover •Profit	•EURO •%	•3 M EURO •>=10%	•Q4 •Q4
Customers	•New Customers •Satisfaction •Visibility	•# •Survey Score •Publications	•>=4 •>=7 •>=3	•Q1 •Q3 •Q3
Processes	•Productivity •Quality •Timing	•EURO/employee •Cost of Quality •Milestone Slip	•... •... •...	•Q4 •Q3 •Q2
People	•Competence •Satisfaction	•Gap •Survey Score	•<10% •>=7	•Q1 •Q4

the Quantitative Approach to Quality Management and Performance Improvement

Initiating a Measurement Program - P. Siemons

2003-11-26 page 13

## BSC - Tracking

- Tracking
  - Monthly Management Meetings
  - Values accumulated from underlying BSC
  - Use support from departments like
    - Finance and Accounting
    - Marketing & Sales
    - Projects & Engineering
    - Human Resources

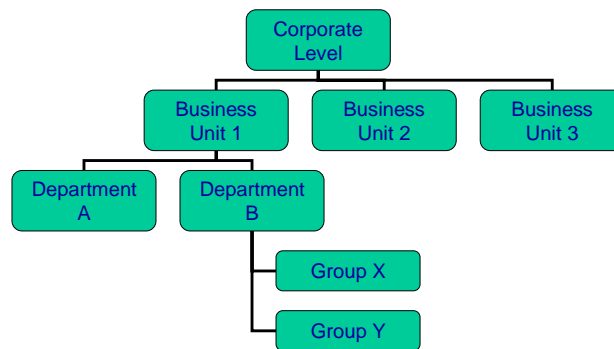
the Quantitative Approach to Quality Management and Performance Improvement

Initiating a Measurement Program - P. Siemons

2003-11-26 page 14

## BSC - Relations

- Translate Scorecard targets down the line
  - Turnover target divided over business units
  - Competence Gap target equal for all units



the Quantitative Approach to Quality Management and Performance Improvement

Initiating a Measurement Program - P. Siemons

2003-11-26 page 15

## Measurements

Getting the Metrics

the Quantitative Approach to Quality Management and Performance Improvement

Initiating a Measurement Program - P. Siemons

2003-11-26 page 16



## Measurement - Goals

---

- Providing insight in performance of
  - Processes
  - Projects
  - Organization
  - Products
  - Personnel

Initiating a Measurement Program - P. Siemons

2003-11-26 page 17

---

the Quantitative Approach to Quality Management and Performance Improvement

## Measurement - Obstacles

---

- Unclear or wrong goals
  - Threatening to personnel
  - Lack of focus
- Unclear definitions
  - Nobody knows what, when and how to measure
- Unpractical data collection
  - Costs too much effort, too large a burden to continue
- Unreliable data
  - Impossible to use data for decision making

Initiating a Measurement Program - P. Siemons

2003-11-26 page 18

---

the Quantitative Approach to Quality Management and Performance Improvement

## Measurement - Recommendations

---

- Unclear or wrong goals
  - Ensure that measurement goals are clear and committed to
    - Use Goal–Question–Metric paradigm
    - Make sure that relation to business goals is made clear
    - Communicate to, involve and motivate all affected parties
    - Create and maintain commitment

## Measurement - Recommendations

---

- Unclear definitions
  - Review definitions with respect to
    - Frequency
    - Accuracy
    - Precision
    - Granularity
    - Responsibility
    - Source
    - Archival
    - Unit
    - ...
  - Look for good examples
  - Involve experts in the field

## Measurement - Recommendations

---

- Unpractical data collection
  - Try to automate data collection as much as possible
    - Reduces differences in interpretation
    - Improves steady collection
    - Lessens impact on other activities
  - Select metrics that can be derived from automatically collected data as much as possible

Initiating a Measurement Program - P. Siemons

2003-11-26 page 21

---

the Quantitative Approach to Quality Management and Performance Improvement

## Measurement - Recommendations

---

- Unreliable data
  - Provide training and coaching to all affected parties
  - Start as soon as possible collecting data
  - Present metrics as soon as possible
    - show what is being done and
    - how well it is done
  - Be prepared to flush the data collected in the initial period
    - This could well be two or more years

Initiating a Measurement Program - P. Siemons

2003-11-26 page 22

---

the Quantitative Approach to Quality Management and Performance Improvement

## Commitment

### Maintaining Motivation

## Commitment - Definition

### Commitment

1. The act or an instance of committing, especially:
  1. The act of referring a legislative bill to committee.
  2. Official consignment, as to a prison or mental health facility.
  3. A court order authorizing consignment to a prison.
2.
  1. A pledge to do.
  2. Something pledged, especially an engagement by contract involving financial obligation.
3.
  1. **The state of being bound emotionally or intellectually to a course of action or to another person or persons:** a deep commitment to liberal policies; a profound commitment to the family.

## Commitment - Reciprocity

- Personal commitment is influenced by the perceptions of the commitment of others
  - **mutual** commitment can be built by a process of signaling and reciprocity
  - **one sided** commitment is difficult to create and maintain

## Commitment - Types

- CC = Continuance Commitment
  - Profit on continuing, cost penalty on leaving
  - “Have to”
- NC = Normative Commitment
  - Internalized pressure to comply
  - “Ought to”
- AC = Affective Commitment
  - Personal identification and/or involvement
  - “Want to”

## Commitment - Focus

- Self
  - Career ambitions, Self esteem, ...
- Professionalism
  - Peers, ...
- Belief systems
  - Religions, ...
- Work group
  - Co-workers, Colleges, ...
- Local Leadership
  - Supervisors, Managers
- Global Leadership
  - Organization, Owners, Shareholders, ...
- Customers
  - Clients, Patients, ...

the Quantitative Approach to Quality Management and Performance Improvement

Initiating a Measurement Program - P. Siemons

2003-11-26 page 27

## Commitment - Functions

(typical)	Continuance	Normative	Affective
Self			SM, MM, C, E
Professionalism		C, E	
Belief systems		SM, MM, C, E	
Work Group			C, E
Local Leaders	MM, E		E
Global Leaders	SM, MM	MM, E	E
Customers	MM, C	C, E	C

E=Engineer, C=Consultant, MM=Middle Management, SM=Senior Management

the Quantitative Approach to Quality Management and Performance Improvement

Initiating a Measurement Program - P. Siemons

2003-11-26 page 28

## Commitment - Creating

---

- How does their commitment to you help them?
  - Achieving business goals
    - Value for money
  - Achieving personal goals
    - Pleasure in working
    - Creativity
    - Professionalism
  - Achieving group goals
    - Loyalty
    - Friendship

---

the Quantitative Approach to Quality Management and Performance Improvement

Initiating a Measurement Program - P. Siemons

2003-11-26 page 29

## Commitment - Maintaining

---

- Provide regular personal feedback on
  - Plans
  - Progress
  - Results obtained
  - How it works towards their goals
  - Each time, check whether you understand their goals & commitments correctly
    - These may change over time!
  - Each time implicitly or explicitly ask for renewed commitment to continue

---

the Quantitative Approach to Quality Management and Performance Improvement

Initiating a Measurement Program - P. Siemons

2003-11-26 page 30

---

## Questions?

Paul Siemons

Principal Consultant  
Metrific Management Consult

a sioux consulting associate

Paul.Siemons@metrific.nl

---

the Quantitative Approach to Quality Management and Performance Improvement